
The Moderating Effect of Risk-Taking Propensity on the Relationship between Perception towards Insurable Risks and General Takaful Demand Among SMEs

FAUZILAH SALLEH^{1*}, ZAINUDDIN AWANG², NORFADZILAH RASHID³, NIK AHMAD SUFIAN BURHAN⁴

^{1*,2,3}Faculty of Business and Management, Universiti Sultan Zainal Abidin, Malaysia;

⁴Department of Social and Development Sciences, Faculty of Human Ecology, Universiti Putra Malaysia, Serdang, Malaysia;

*Corresponding Author

Email ID: fauzilah@unisza.edu.my, drzainudin888@gmail.com, nikmfadzilah@unisza.edu.my, nikahmadsufian@upm.edu.my

Abstract: This study aimed to evaluate the influence of perception towards insurable risks on the general Takaful demand via risk-taking propensity among small and medium enterprises (SMEs) in Malaysia. This study presented essential insights that would benefit Takaful operators in determining and enhancing general Takaful demand among SMEs. Studies have identified two major factors of risk behaviour that influence general insurance demand, which are the perception towards insurable risks (independent variable) and risk-taking propensity (moderator). This study presented theoretically significant information on the incorporation of perception towards insurable risks and risk-taking propensity to explain the general Takaful model. For this study, a total of 278 SMEs in Malaysia were sampled. All gathered data were analysed using AMOS for the testing of hypotheses. The results of structural equation modelling (SEM) revealed perception towards insurable risks as the key factor that drives the general Takaful confidence in decision making and risk-taking propensity as a moderator in the relationship between the perception towards insurable risks and general Takaful demand. Apart from providing a clearer overview of Takaful demand among SMEs in Malaysia, the obtained findings of this study also highlighted the significance of healthy and ethical behaviour in decision making in order to protect the organisational resources and accomplishments.

Keywords: small and medium enterprises (SMEs), Takaful, risk-taking propensity

INTRODUCTION

Being a dominant Takaful contributor (71%) in the ASEAN region, especially in the family and medical Takaful, has contributed a solid industrial growth (21%) for Malaysia. Unlike the dominance of general Takaful market in Gulf Cooperation Council (GCC), the family Takaful market (approximately 78%), which is of lower risk, dominates the Takaful business in Malaysia (Ernst & Young, 2013). Focusing on the performance of the Takaful market in Malaysia, the increase in the contribution towards general and family Takaful has contributed to a steady increase in the demand for both Takaful products for the past 30 years. In 2017 alone, the total gross contribution towards general Takaful (with an average growth of 3.60% or RM 841.11 million) and family Takaful (with an average growth of 19.70% or RM 5,046.68) recorded an overall growth of 18.69% along with robust financial performance and higher consumer expenditure (BNM, 2013). Despite the low market penetration rate of the Takaful market at approximately 15% (BNM, 2014), the complementary nature of these two significant Takaful products has contributed to the growth of the Takaful market. The market penetration of family Takaful is higher than the market penetration of general Takaful. The contribution of family Takaful (0.6% or RM 37.277 million) to the net contribution income surpassed the contribution of general Takaful (0.1% or RM 6.2045 million) (BNM, 2014). Clearly, the general Takaful products have been poorly received by Malaysians.

This study was expected to contribute valuable insights on the demand for Takaful products and significant factors that contribute to the demand for Takaful products among SMEs in Malaysia. SME-Flexi-PLUS by HSBC Amanah Takaful and mySME BizPartner by Takaful Malaysia are two examples of Takaful products that insure properties from any law-breaking activities, fires, and liability for SMEs in Malaysia. SME entrepreneurs have the autonomy to select different protection options offered by the Takaful operators.

LITERATURE REVIEW

Demand for general Takaful

The demand for general insurance has been widely used to determine the market penetration of the insurance sector worldwide. Meanwhile, past studies measured the demand for insurance based on the insurance premium with the availability of the financial statement of an organisation. In fact, the insurance premium is a tool to measure both unit price and quantity. Moreover, the financial statement of a large organisation or publicly listed organisation can be easily acquired by the stakeholders (Dakhlallah et al. 2020). The unit price varies according to the level of risk involved.

From 2000 to 2014, studies assessed the demand for general insurance in terms of the use of insurance premium (Hoyt and Khang 2000). Following that, more recent studies from 2015 to 2018 assessed the demand for general insurance in terms of the Takaful contribution and the ratio of property Takaful contribution to the total sum insured (Daud et al. 2017; Foziah et al. 2018; Salleh et al. n.d.). The ratio of property Takaful contribution to the total sum insured was used given the focus of the current study on Takaful operators. For this study, the Takaful contribution in relation to the number of Takaful guidelines in the insurance sector or in other words, the demand for general Takaful served as the dependent variable, while the perception towards insurable risks served as the independent variable and risk-taking propensity was assessed as a moderator. Apart from the use of secondary data, a questionnaire survey that involved SMEs in Malaysia was also conducted.

Perception towards insurable risks

The risks related to SMEs are strongly linked to their risk behaviour. (Bota 2013) described risk behaviour as the level of risks involved in risky decisions, such as ambiguous outcomes, challenging decision goals, or radical implications involved. There are various factors that affect one's perception towards risks, particularly bad past experiences. According to (Michel-Kerjan, Raschky, and Kunreuther 2011) the perception towards risks involves the evaluation of risks in terms of how the risks can be contained; how much risks are intended; the extent of the prospective damage presumed; the ambiguity of the implications—these aspects influence how risks are mitigated. Taking the case of the risk of fires, the propensity for a trader to take action to insure a business against fire damage is lower when the trader assumes low risk of fires but it is not easy to escape and predict such risks that involve natural disasters (Sadiq and Ishaq 2014). With a good understanding of these relationships, effective policies to deal with natural disasters (e.g. floods and wildfires) can be developed. Through these policies, people who reside in areas that are prone to natural disasters (e.g. flood-prone area or fire-prone area) can be adequately prepared (Salleh and Saufi 2020).

Numerous past studies explored nine key determinants of risk behaviour that can be grouped into three groups, depending on the attributes of the one who makes the decision, organisation, and the problem itself (MacMinn, Ren, and Han 2012). Focusing on decision-making behaviour, (Sahul Hamid et al. 2013) grouped risks into risk perception, risk propensity, and readiness to take risks. As for the current study, perception towards insurable risks and risk-taking propensity were specifically assessed.

Accordingly, the possibility of risks and the severity of loss due to the risks influence one's perception towards risks, particularly on the insurance purchasing intention, the extent of the insurance coverage, and the demand for insurance. The decision to obtain insurance against risks that involve life and properties is made based on one's perception towards insurable risks. How the possibility of risks and severity of loss due to the risks are weighed are linked to the type of insurance product required. Taking the case of considering a third-party policy, one may seem to consider the severity of property loss but emphasises the possibility of being charged. Hence, it is crucial to consider both of these elements when it comes to understanding one's perception towards risks.

As for the current study, the perception towards insurable risks was assessed from different perspectives. The indirect influence of perception towards insurable risks on insurance purchasing intention was found plausible through the perception towards social norms (Kellens, Terpstra, and Maeyer 2013). In other words, the perception towards risks does not necessarily influence one's behaviour, as the behavioural changes may take place because one's perceived social position within the group. Considering the socio-cultural context, the influence of perception towards risks can be viewed as both cause and effect. With respect to the Shariah laws, Takaful offers protection through the contribution of funds (Tabarru) to a common Takaful fund, where all members must come to an agreement to mutually help one another and there would not be a loss when no claim is made (Daud et al. 2017). For the current study, the term "perception towards insurable risks", which is commonly used in the finance domain, was applied. Assessing the influence of perception towards insurable risks on making insurance decisions enabled the current study to conceptualise how the perception towards insurable risks can affect the demand for general Takaful insurance.

Risk-taking propensity

When it comes to decision making, risk propensity is typically described as one's inclination in taking or avoiding risk (Aaby and Slater 1989). There are three levels to risk-taking propensity among entrepreneurs, which are low, moderate, and high (Salleh and Ibrahim n.d.). Entrepreneurs who display a moderate level of risk-taking

propensity were said to possess high achievement needs and success (Kozubíková et al. 2017). However, certain studies found contradictory findings, where entrepreneurs who display a high level of risk-taking were found to possess greater success (Ozaralli and Rivenburgh 2016).

The risk-taking propensity of SMEs in the current study was hypothesised to exhibit moderating effect on the influence of perception towards insurable risks on general Takaful demand. Despite the favourable perception towards insurable risks, high risk-taking propensity was postulated to reduce the inclination of SMEs to insure their business resources and properties. With higher risk-taking propensity, SME entrepreneurs would have a better chance to cope with ambiguities and pressure and achieve greater success in their business ventures (Sahul Hamid et al. 2013). This hypothesis was consistent with the statement on the significant changes of risk-taking attitude among Takaful operators and SMEs through risk-taking propensity. Moreover, risk-taking propensity was found to positively influence the performance of various entrepreneurship settings in a meta-analysis (Zhao, Seibert, and Lumpkin 2009).

Despite the growing research interest on risk-taking propensity, only a few studies assessed the moderating effect of risk-taking propensity over the past two decades (Foziah et al. 2018). Moreover, a large proportion of these studies on the moderating effect of risk-taking propensity were conducted across different domains. Focusing on the investment intention, several studies demonstrated the moderating effect of risk-taking propensity in relation to the two dimensions of perceived risk, namely “uncertainty” and “importance” (Beisswingert et al. 2015), with the incorporation of attitude, social norm, and perceived behavioural control. Nevertheless, the moderating effect of risk-taking propensity has remained in question, as certain studies found contradictory findings (Sitkin and Pablo 1992). The moderating effect of risk-taking propensity may affect the insuring decision through social inclination. Instead of reflecting risk-taking propensity, adaptive behaviour may be the result of the influence of risk-taking propensity in terms of the individual inclination in business. There is a feedback process in which the effect, shaping and being shaped by SMEs risk-taking propensity. With that, two hypotheses were proposed for testing:

Hypothesis 1: The perception towards insurable risk significantly and positively influences general Takaful demand among SMEs.

Hypothesis 2: The relationship between perception towards insurable risk and general Takaful demand is moderated by risk-taking propensity among SMEs.

METHODOLOGY

Focusing on SMEs, the current study explored the combination of decision-making behaviour and demand for general Takaful within the Malaysian context, which has not been explored in other studies. Despite the vast literature on the influence of risk behaviour on insurance decision-making behaviour with respect to the prospect theory (Buzatu 2013), related studies on the influence of perception towards insurable risks and the moderating effect of risk-taking propensity have remained scarce. The incorporation of decision-making behaviour of SMEs and the demand for general Takaful in the current study presented significant theoretical contributions.

The unit of analysis guides the focus of the study in the forms of individuals, dyads, and groups (Kaur 2019). Considering the primary purpose of this study on evaluating the influence of perception towards insurable risks on the general Takaful demand via risk-taking propensity among small and medium enterprises (SMEs) in Malaysia, SMEs in Malaysia with the following key characteristics were viewed as potential respondents: (1) SMEs defined by SME Corp (2014); (2) registered private limited company with the Company’s Commission of Malaysia (Suruhanjaya Syarikat Malaysia); (3) contribute to the general Takaful; (4) active business operation. With that, 400 SME entrepreneurs who have a good understanding of their business background (including size, business operation, and risks involved) were selected for this study.

Besides that, the insurance demand of an organisation can be assessed in terms of the number of insurance units purchased per unit price of insurance but direct measurement using the accounting data is a complex practice (Burhan et al. 2017). As insurance premium constitutes both unit price and quantity, most past studies in a similar domain measured the insurance demand in terms of insurance premium instead. Hence, the demand for general Takaful in the current study was measured as “the ratio of property Takaful contributions to the sum insured of insurable general property”.

FINDINGS

The respondents’ profile includes the size of the business, number of employees, number of policies, annual contribution, the sum insured and the type of policies used to describe the sample characteristics. Table 2 shows the respondents’ characteristics. The study managed to obtain 278 valid questionnaires from a total number of 400 sets distributed to the respondents. This figure represents the response rate of 69.5%. The respondents’ profile showed that a higher number of the small size companies (156 respondents or 56.1%) had responded to the survey compared to medium size companies (122 respondents or 43.9%). Hence, the generalization of this study is only valid for small and medium-sized companies. The structural model has to be assessed for the goodness-of-fit indices in order to prove that the structural model fits the data. A good fit to the sample data grants support for the

hypothesized model (Farrugia et al. 2010). The Fitness Indexes in Table 1 indicate that this modified model fits the data adequately. The model shows an acceptable fit, thus enabling further analysis as the parsimonious fit was χ^2 / df index of 2.495, which was below the 3.0 threshold value defined by Kline (1998). The RMSEA of 0.073 clearly falls within the acceptable range of 0.030 and 0.080. Other fit indices such as the CFI = 0.967 was also above the threshold value of 0.9. In view of the indices, it was concluded that the data is a good fit for the model as shown in Table 1.

Table 1: The Fitness Indexes for the Structural Model

Name of Category	Name of Index	Index Value	Comments
1. Absolute Fit	RMSEA	0.073	The required level is achieved
2. Incremental Fit	CFI	0.967	The required level is achieved
3. Parsimonious Fit	ChiSq/df	2.495	The required level is achieved

R² is an indication of how much variance of a dependent variable is depicted by the independent variables. Perception towards insurable risk and demand are dependent variables in the proposed model and their R² values are presented in Table 2.

Table 2: The Squared Multiple-Correlation (R²)

Dependent variable	R ² value
Perception towards Insurable Risk	.30
General Takaful Demand	.51

To test the overall fit of the proposed model, the model with all constructs of interest (Perception towards insurable risk, and General Takaful Demand) were tested simultaneously using AMOS, as shown in Figure 1. The structural model must be assessed for the goodness-of-fit indices in order to prove that the structural model fits the data. A good fit to the sample data grants support for the hypothesized model. Hypothesis 1 tested the relationship between the perception towards insurable risk and general Takaful demand. It was hypothesized that perception towards insurable risk could affect general Takaful demand. The research results suggested that the proposed relationship was statistically significant ($\beta = 0.188, p < 0.01$), as shown in Table 3. The path for the perception towards insurable risk to general Takaful demand was 0.188, suggesting that the perception towards insurable risk increased 0.188 units for every unit increase in general Takaful demand. Hence, hypothesis 1 is supported.

Table 3: The Hypothesis Testing for the Relationship between Perception towards Insurable Risk and General Takaful Demand

Hypothesized Path	Standardized path coefficient	C.R.	P	Result
DEMAND <--- PERCEPTION	0.188	2.916	.004**	Significant

Note: **p<0.01

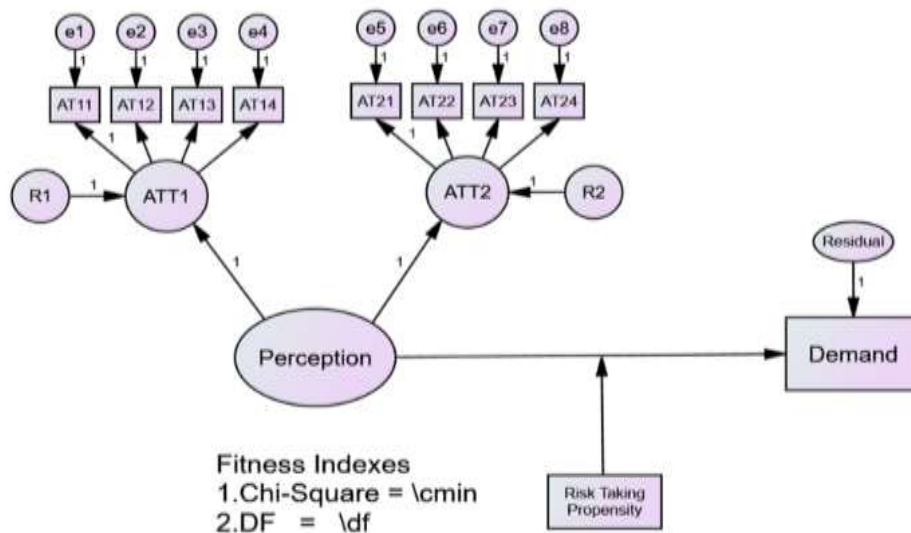


Fig.1: The Structural Model for Testing RTP as a Moderator

The study conducted the moderation test as proposed by (Aziz, Afthanorhan, and Awang 2016).

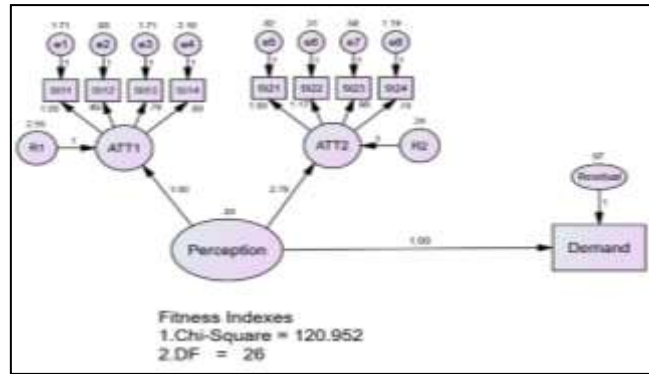


Fig.2a: Data Low RTP Level and Constrained Model

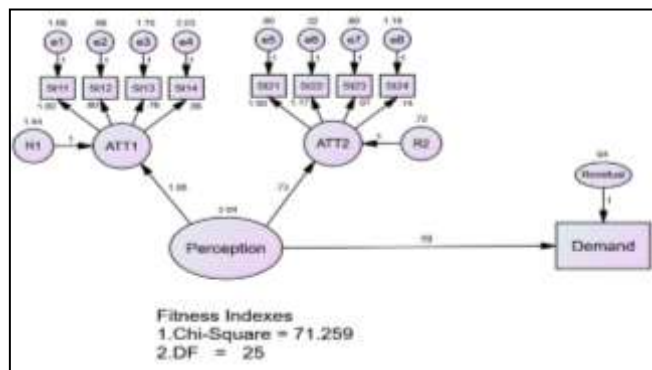


Fig.2b: Data Low RTP Level and Unconstrained Model

Table 4a: The Regression Coefficient and its Significance for Low RTP

			Estimate	S.E.	C.R.	P	Result
Demand	<---	Perception	0.188	.059	3.203	.001	Significant

Table 4b: Testing the Moderator for Low RTP Level

	Constrained Model	Unconstrained Model	Chi-Square Difference	Result on Moderation	Result on Hypothesis
Chi-Square	120.952	71.259	46.693	Significant	Supported
DF	26	25	1		
The hypothesis statement: H2: Low RTP level moderates the relationship between Perception and Demand					Supported

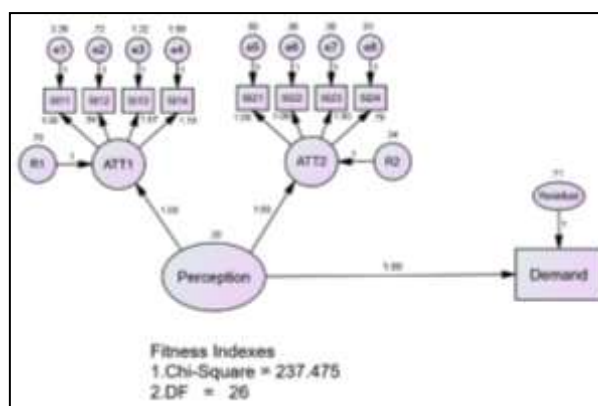


Fig.3a: Data High RTP Level and Constrained Model

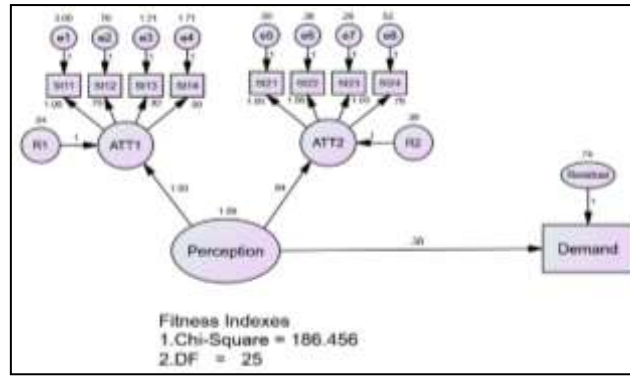


Fig.3b: Data High RTP Level and Unconstrained Model

Table 5a: The Regression Coefficient and its Significance for High RTP

			Estimate	S.E.	C.R.	P	Result
Demand	<---	Perception	.375	.054	6.973	***	Highly Significant

Table 5b: Testing the Moderator for High RTP Level

	Constrained Model	Unconstrained Model	Chi-Square Difference	Result on Moderation	Result on Hypothesis
Chi-Square	237.475	186.456	51.019	Significant	Supported
DF	26	25	1		
The hypothesis statement: Ha: High RTP level moderates the relationship between Perception and Demand					Supported

Based on the result for testing moderation in Table 4b (Low RTP) and Table 5b (High RTP), the study concludes that the moderation effects of RTP level occurs in the relationship between Perception and Demand since in both testing, the difference in Chi-Square value is greater than 3.84. As for the type of moderation, the study needs to compare the results of regression slope between Low RTP data (refer to Table 4a) and High RTP data (refer to Table 5a). The study found that, in both dataset the slope of the regression is significant. The result for Low RTP: (B1=0.188, P=0.010), while the result for High RTP: (B2=0.375, P= ***). Thus, the type of moderation is partial moderation, meaning in both level (Low RTP and High RTP), the effects are significant. The only difference is the effects is much higher among High RTP respondents compared to Low RTP respondents (0.375 vs 0.188).

CONCLUSION

In this study, the researcher approaches the empirical investigation regarding general Takaful demand from a new perspective, which is a moderate approach between existing trans-border studies and micro-data analyses of the firms' decision-making behaviour and general Takaful demand survey. Data availability for Malaysian Takaful contribution limits the analysis about the insured firms that are listed by the Takaful operators only. The research concentrates on the consumption of general Takaful, both non-compulsory and compulsory general Takaful policies, which is comparatively low in Malaysia in comparison to conventional insurance. The goal is to assess the reasons for this underdevelopment. The study found that perception towards insurable risk as a proxy for the general Takaful demand is also supported. Perception towards insurable risk is a positive driver in making any decision since the risk exposes the company's assets and activities for the same reason. Both these findings emphasize the importance of healthy behaviour and correct decision-making, which afford coverage on assets and the company's activities.

Furthermore, this study investigated the firms' decision-making behaviour processes in order to explain SMEs' behaviour within organizations. The effort has contributed to the literature of decision-making behaviour, especially in the Malaysian context. In general, this study provides, perhaps for the first time, an analysis of the relationship between perception towards insurable risks and general Takaful demand by integrating the moderating effect of risk-taking propensity level. In addition, the moderating effect of risk-taking propensity level was analysed using moderated regression analysis and supplemented with a more recent method introduced by (Sarstedt et al. 2016) using AMOS.

To conclude, by testing all the hypothesized relationships, this study helps to create a more inclusive global picture of the antecedents and outcomes of general Takaful demand among SMEs in Malaysia. This study provides a useful starting point for investigating general Takaful demand by integrating the decision-making behaviour. Besides contributing new knowledge to the existing literature on general Takaful demand, the findings were

predicted to aid Takaful operators in dealing more effectively with Takaful demand. Therefore, understanding general Takaful demand among SMEs could be a valuable research field to venture into in the future.

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